

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau(43) International Publication Date
15 January 2004 (15.01.2004)

PCT

(10) International Publication Number
WO 2004/006257 A1(51) International Patent Classification⁷: G11B 23/00,
27/00, 20/00, G06F 1/00, G11B 7/26(74) Agent: DEGUELLE, Wilhelmus, H., G.; Philips Intel-
lectual Property & Standards, Prof. Holstlaan 6, NL-5656
AA Eindhoven (NL).(21) International Application Number:
PCT/IB2003/003000

(22) International Filing Date: 27 June 2003 (27.06.2003)

(25) Filing Language: English

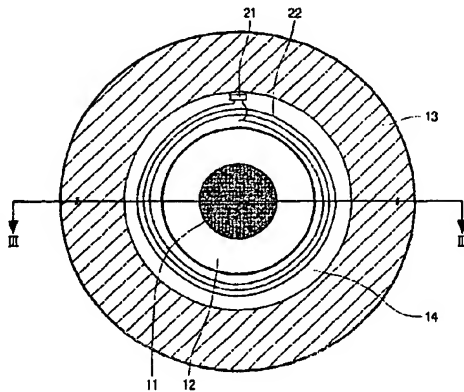
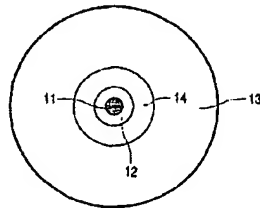
(26) Publication Language: English

(30) Priority Data:
02077712.4 8 July 2002 (08.07.2002) EP(71) Applicant (for all designated States except US): KONIN-
KLIJKE PHILIPS ELECTRONICS N.V. [NL/NL];
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phus, A., H., M. [NL/NL]; c/o Prof. Holstlaan 6, NL-5656
AA Eindhoven (NL).(81) Designated States (national): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC,
SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG,
US, UZ, VC, VN, YU, ZA, ZM, ZW.(84) Designated States (regional): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: INFORMATION CARRIER PROVIDED WITH A TRANSITIONAL REGION BETWEEN THE CLAMPING AREA
AND THE INFORMATION AREA

(57) Abstract: An information carrier on which a clamping area (12) and an information area (13) are defined, has an integrated circuit and an antenna (22) which is coupled to the integrated circuit. The antenna is positioned in the region between the information area and the clamping area. The disc also has a metal layer and a polycarbonate layer in which the information is stored. To improve the communication between the integrated circuit on the disc and the apparatus, the information carrier has no metal layer in the region of the antenna, i.e. the region between the information area and the clamping area. In this way, there is no possibility for eddy currents to occur.

WO 2004/006257 A1

**Declaration under Rule 4.17:**

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AI, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU,

TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

Published:

— with international search report

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INTERNATIONAL SEARCH REPORT

Intern: cation No
PCT/IB 03/03000

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G11B23/00 G11B27/00 G11B20/00 G06F1/00 G11B7/26

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G11B G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 996 124 A (HITACHI LTD) 26 April 2000 (2000-04-26) cited in the application	1-3
A	paragraphs '0051!, '0069!; figures 5A-6D ---	4
X	WO 00 23994 A (INTERMEC IP CORP) 27 April 2000 (2000-04-27) page 10, line 25 -page 14, line 7; figures 1-33 ---	1,3
X	EP 0 720 327 A (NIPPON ELECTRIC CO) 3 July 1996 (1996-07-03) column 1, line 23 - line 58; figures 1,2 ---	4
X	US 5 862 177 A (HALL ERIK M ET AL) 19 January 1999 (1999-01-19) figures 9,10 --- -/--	1,3



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Patent family members are listed in annex.

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Date of the actual completion of the international search

15 October 2003

Date of mailing of the international search report

23/10/2003

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INTERNATIONAL SEARCH REPORT

Intern lication No
PCT/IB 03/03000

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 540 800 A (QIAN XUEYU) 30 July 1996 (1996-07-30) column 3, line 55 - line 62; figure 2 -----	2
A	US 6 044 046 A (DIEZMANN NILS ET AL) 28 March 2000 (2000-03-28) abstract -----	1-4

INTERNATIONAL SEARCH REPORT

Interr ublication No
PCT/IB 03/03000

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0996124	A	26-04-2000	JP 2000132871 A	12-05-2000
			EP 0996124 A1	26-04-2000
			TW 452784 B	01-09-2001
			US 2002097664 A1	25-07-2002
			US 6373799 B1	16-04-2002
WO 0023994	A	27-04-2000	WO 0023994 A1	27-04-2000
EP 0720327	A	03-07-1996	JP 8181679 A	12-07-1996
			AU 699160 B2	26-11-1998
			AU 4063995 A	18-07-1996
			CA 2165595 A1	27-06-1996
			EP 0720327 A2	03-07-1996
			KR 175416 B1	01-04-1999
US 5862177	A	19-01-1999	NONE	
US 5540800	A	30-07-1996	JP 8088220 A	02-04-1996
US 6044046	A	28-03-2000	DE 19616819 A1	30-10-1997
			AT 216120 T	15-04-2002
			AU 2767497 A	19-11-1997
			DE 59706971 D1	16-05-2002
			DK 895637 T3	01-07-2002
			WO 9741562 A1	06-11-1997
			EP 0895637 A1	10-02-1999
			ES 2175403 T3	16-11-2002
			JP 2000509541 T	25-07-2000
			PT 895637 T	30-09-2002